

Illinois Environmental Protection Agency
Bureau of Air, Permit Section
1021 N. Grand Avenue East
P.O. Box 19506
Springfield, Illinois 62794-9506

Project Summary for an Application from
Ingersoll Machine Tools, Inc. for a
Federally Enforceable State Operating Permit (FESOP) Renewal for
707 Fulton Avenue
Rockford, Illinois 61103

Site Identification No.: 201030ACI
Application No.: 73010609

Illinois EPA Contacts

Permit Analyst: David Hulskotter

Community Relations Coordinator: Brad Frost
217/782-7027
Brad.frost@illinois.gov

I. INTRODUCTION

Ingersoll Machine Tools, Incorporated has applied for a renewal of their Federally Enforceable State Operating Permit (FESOP) for its tool manufacturing plant at 707 Fulton Avenue in Rockford. This plant requires an air pollution control operating permit because it is a source of emissions. The Illinois EPA has prepared a draft of the permit that it would propose to issue for the plant. However, before issuing the permit, the Illinois EPA is holding a public comment period to receive comments on this proposed action and the terms and conditions of the draft permit that it would propose to issue.

II. SOURCE DESCRIPTION

Ingersoll Machine Tools, Incorporated designs and manufactures large machine tools. The plant includes a variety of metal working related operations such as grinding, welding, plasma cutter, and abrasive blasting. The large welding/cutting shop includes multiple area pick-ups for related smoke, which is ducted to a bank of electrostatic precipitators. The plant has a single large paint booth where hand spraying is done. The booth uses a downdraft system with dry spray filters below the booth which exhausts outdoors. The plant also operates two Cleaver Brooks boilers.

The major air pollutant of concern at this facility is volatile organic material (VOM). The largest source of VOM at this facility is the paint booth. VOM is contained in the paints, sealers, thinners and cleaners. The VOM is evaporated into the atmosphere when these materials are used.

The two boilers combust natural gas. Nitrogen oxides are emitted from the fuel combustion equipment. Nitrogen oxides are formed thermally by a combination of oxygen and nitrogen in the air at the temperatures at which fuel is burned. Thermal nitrogen oxides formed during the operation of all common high temperature combustion processes.

Carbon monoxide is also emitted from the fuel combustion equipment. It is formed by the incomplete combustion of fuel. Carbon monoxide is associated with most combustion processes and is found in measurable amounts in the exhausts of fuel combustion equipment. Other contaminants formed by the combustion of natural gas are particulate matter and VOM. These air pollutants are emitted in smaller amounts than nitrogen oxides and carbon monoxide.

III. GENERAL DISCUSSION

Federally Enforceable State Operating Permits (FESOPs) are federally enforceable, that is, the terms and conditions of the permits can be enforced by USEPA under federal law,

as well as by Illinois government and the public under state law. These permits can establish federally enforceable limitations on the operation and emissions of a source that restrict the potential emissions of the source.

The source has applied for a FESOP because the actual emissions of the plant are below the levels at which the plant would be considered a major source under Title V of the federal Clean Air Act. However, in the absence of federally enforceable limitations, the plant's potential emissions would be such that the plant would be considered a major source. The permit acts to restrict the plant potential emissions so that it need not be considered a major source. As a result, the source does not need to obtain a Clean Air Act Permit Program (CAAPP) permit for the plant, as would otherwise be required.

The FESOP limits the operation and annual emissions of the plant to below the major-source-thresholds of 100 tons for VOM, 10 tons for an individual HAP and 25 tons for combined HAPs.

IV. APPLICABLE EMISSION STANDARDS

All emission units in Illinois must comply with state emission standards adopted by the Illinois Pollution Control Board. These emission standards represent the basic requirements for sources in Illinois. The Illinois Pollution Control Board has specific standards for units emitting volatile organic material. The specific standard for this company is 35 Ill., Adm. Code 215 Subpart F Regulations for Coating Operations. These regulations limit the amount of VOM that may be in the coatings used. There is a National Emission Standard for Hazardous Air Pollutants (NESHAP) for coating of miscellaneous metal parts and products, 40 CFR 63, subpart M. The requirements of the NESHAP apply to major sources of hazardous air pollutants. This source has emission limits in its permit that keep the amount of hazardous air pollutants below major levels therefore the NESHAP regulations do not apply. The application shows that the plant is in compliance with applicable state and federal emission standards.

V. CONTENTS OF THE PERMIT

This permit that the Illinois EPA is proposing will identify the specific emission standards that apply to the emission units at the plant. As explained, the paint booth is subject to 35 Ill. Adm. Code 215.204(j), which requires extreme performance miscellaneous metal parts and products coatings not to contain more than 3.5 pounds of VOM per gallon of coating. The conditions of this permit are intended to ensure that the source continues to comply with applicable emission standards.

The permit would also contain limitations and requirements to assure that this plant is operated as a non-major source. The permit would limit the operation and annual emissions of the plant to below the major-source-thresholds of 100 tons for VOM, 10

tons for an individual HAP and 25 tons for combined HAPs. (Annual emissions of other pollutants from the plant are well below the 100 ton major source threshold.)

The permit would also set limitations on the amount of VOM used in the coatings and solvents. These limitations are consistent with the historical operation of emission units at the plant.

The permit conditions would also require appropriate compliance procedures, including inspection practices as well as recordkeeping and reporting requirements. The source must carry out these procedures on an on-going basis to demonstrate that the plant is being operated within the limitations set by the permit and that the plant's emissions are being properly controlled.

VI. REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that the source has met the requirements for issuance of its permit. The Illinois EPA is therefore proposing to renew the permit.

Comments are requested on this proposed action by the Illinois EPA and the proposed conditions on the draft permit. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 IAC Part 166.